

NEWS, SPOTTED

Spotted around the web: Predictive power of language delay; pediatricians' role in diagnosing autism; disease terminology

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WEEK OF OCTOBER 17TH

Research roundup

- Mutations in the CHD8 gene shorten the cell cycle and unleash neural precursor cell proliferation, which may contribute to the macrocephaly seen in people with CHD8-linked autism. *Biology Open*
- People with Schaaf-Yang syndrome, which is associated with autism, tend to have low muscle tone and developmental delay and often need assistance with walking and eating. *Journal of Human Genetics*
- Language delay appears to be the strongest predictor of autism in toddlers, according to a medical records study. *Journal of Autism and Developmental Disorders*
- Variables such as age, gender and bowel behavior can be confounding factors when researchers attempt to characterize gut microbiomes in autistic and non-autistic children. *Scientific Reports*
- Clinical diagnoses of autism align well with scores from a commonly used tool, the Autism Diagnostic Observation Schedule 2. *JAMA Pediatrics*
- A group of clinicians recommends a tiered diagnostic path for autism, starting with primary care pediatricians, to shorten waitlists for specialist evaluations. *Autism Research*
- Variants of the autism-linked CNTNAP2 gene affect mitochondrial function, axonal transport and synapse activity, according to a multi-omics analysis of organoids, knockout mice and autistic people. *Molecular Psychiatry*

Quick read: A new MRI technique improves time and space resolution of neuronal activity in mice.

Courtesy of Jang-yeon

- The brain's hemispheres seem to function more independently in autistic people than in non-autistic people, according to an imaging study. *Journal of Neuroscience*
- Neurons in the dentate gyrus, a hippocampal structure, have increased excitability in mice missing one copy of the RAI1 gene, which is linked to autism and epilepsy. *PNAS*
- In a survey, some physicians have expressed their reluctance to treat people with disabilities, in part because of insufficient reimbursement for accommodations. *Health Affairs*

Science and society

- Autism researcher Sergiu Pa?ca of Stanford University discusses his work using human cell-derived organoids to better understand brain structure and function. *Quanta Magazine*
- Princess Royal Anne knighted autism researcher Simon Baron-Cohen last week, the first such investiture since Queen Elizabeth II's death. *Cambridge Independent*
- A new MRI technique called direct imaging of neuronal activity, or DIANA, appears to have superior time and space resolution compared with functional MRI. *STAT*
- Researchers offer alternatives to terms, such as risk factor, symptom and cure, that autistic advocates have long argued against. *Trends in Neurosciences*
- The science podcast "The Pulse" takes an in-depth and multi-perspective look at the downsides and benefits of applied behavior analysis for autism. *WHYY*

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